Aspen Center for Physics
BOX 1208 • ASPEN, CO 81612 • 303/925-2585

January 6, 1993

Ms. Pam J. Trego
Office of Naval Research
Bandelier Hall West
University of New Mexico
Albuquerque, NM 87131

Re: Grant N00014-92-J-1383

Dear Ms. Trego:

Enclosed find the following documents relating to the above grant:

- One copy of SF269
- One final Statement of Accounts
- One copy of SF298, with final report attached

No property was acquired in the performance of this grant.

This report is being distributed as follows:

- 3 copies to Donald Liebenberg
- 1 copy to the Defense Technical Information Center

If you have any questions, please do not hesitate to call or fax me. My phone is (904) 392-5704, and my FAX is (904) 392-8743.

Sincerely yours,

P. Ramond
Treasurer, ACP

PR/pyd

FINANCIAL STATUS REPORT

(Follow instructions on the back)

1. FEDERAL AGENCY AND ORGANIZATIONAL ELEMENT TO WHICH REPORT IS SUBMITTED	2. FEDERAL GRANT OR OTHER IDENTIFYING NUMBER
OFFICE OF NAVAL RESEARCH DEPARTMENT OF THE NAVY	

3. RECIPIENT ORGANIZATION (Name and complete address, including ZIP code)	4. EMPLOYER IDENTIFICATION NUMBER	5. RECIPIENT ACCOUNT NUMBER OR IDENTIFYING NUMBER	6. FINAL
ASPEN CENTER FOR PHYSICS P.O. Box 1206 ASPEN CO 81612	84-6054504	403591 1000	☑ Y

8. PROJECT/GRANT PERIOD (See instructions)		9. PERIOD COVE
FROM (Month, day, year)	TO (Month, day, year)	FROM (Month, day, year)
Dec 1, 1991	Nov 30, 1992	DEC 1, 1991

10. STATUS OF FUNDS

PROGRAMS/FUNCTIONS/ACTIVITIES ▶	(a) ASPEN WORKSHOP ON FUTURE TRENDS IN LOW TEMPERATURE PHYSICS	(b)	(c)	(d)	(e)	(f)
a. Net outlays previously reported	$ 0	$	$	$	$	$
b. Total outlays this report period	24,916					
c. *Less:* Program income credits	0					
d. Net outlays this report period *(Line b minus line c)*	24,916					
e. Net outlays to date *(Line a plus line d)*	24,916					
f. *Less:* Non-Federal share of outlays	13,416					
g. Total Federal share of outlays *(Line e minus line f)*	11,500					
h. Total unliquidated obligations	0					
Less: Non-Federal share of unliquidated obligations shown on line h	0					
Federal share of unliquidated obligations	0					
k. Total Federal share of outlays and unliquidated obligations	11,500					
Total cumulative amount of Federal funds authorized	11,500					
m. Unobligated balance of Federal funds	0					

11. INDIRECT EXPENSE	a. TYPE OF RATE *(Place "X" in appropriate box)* ☐ PROVISIONAL ☐ PREDETERMINED ☒ FINAL ☐ FIXED			
	b. RATE	c. BASE	d. TOTAL AMOUNT	e. FEDERAL SHARE
	$176/participant-week	$76/participant-week	13,376	0

12. REMARKS: *Attach any explanations deemed necessary or information required by Federal sponsoring agency in compliance with governing legislation.*

13. CERTIFICATION

I certify to the best of my knowledge and belief that this report is correct and complete and that all outlays and unliquidated obligations are for the purposes set forth in the award documents.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL

TYPED OR PRINTED NAME AND TITLE

P. RAMOND, TREASURER

59-102

1 of 2

WHICH REPORT IS SUBMITTED	2. FEDERAL GRANT OR OTHER IDENTIFYING NUMBER	OMB Approved No. 80–R0180	PAGE OF PAGES

5. RECIPIENT ACCOUNT NUMBER OR IDENTIFYING NUMBER	6. FINAL REPORT	7. BASIS
4035911000	☑ YES ☐ NO	☑ CASH ☐ ACCRUAL

uctions)	9. PERIOD COVERED BY THIS REPORT	
y, year)	FROM (Month, day, year)	TO (Month, day, year)
30, 1992	DEC 1, 1991	NOV 30, 1992

(d)	(e)	(f)	TOTAL (g)
$	$	$	$

of my knowledge and be- is correct and complete and d unliquidated obligations es set forth in the award	SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	DATE REPORT SUBMITTED 1-6-93
	TYPED OR PRINTED NAME AND TITLE P. RAMUND, TREASURER	TELEPHONE (Area code, number and extension) 904 392 5704

STANDARD FORM 269 (7–76)
Prescribed by Office of Management and Budget
Cir. No. A–110

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ASPEN CENTER FOR PHYSICS

Final Statement of Accounts
ONR Grant N00014-92-1383

Description	Budget	Expended
Junior and Foreign Participant Support	$10,000	$10,075
Mailing	$ 500	$ 462
Secretarial expenses	$ 1,000	$ 963
Total	$11,500	$11,500

SUMMARY OF THE 1992 WINTER ACP WORKSHOP

ON

FUTURE TRENDS IN LOW TEMPERATURE PHYSICS

The one week workshop took place in Aspen January, 1992 and was attended by 76 physicists. It was very successful in gathering the best physicists in the world on that subject and provided a natural environment for discussions among experimentalists and theorists.

FUTURE TRENDS IN LOW TEMPERATURE PHYSICS

ASPEN WINTER CONFERENCE ON CONDENSED MATTER PHYSICS, 1992

The morning sessions will begin at 7:45 am and are expected to last until 10:30 am. All of the talks will be 40 minutes in length with 10 minutes for discussion. There will be a 15 minute coffee break after the second lecture at 9:25 am. The evening sessions will begin at 5:00 pm. Because of the Public Lecture on Wednesday, there will be no evening session on that day.

Monday Morning-Chair: J. Reppy

M. Chan	"Boson Localization and the Onset of Superfluidity of ^{4}He in Vycor"
G. Ahlers	"Critical Phenomena in the ^{4}He-Aerogel System"
D. Fisher	"Quantum Phase Transitions in Random Media"

Monday Evening-Chair: F. Gasparini

R. Richardson	"^{3}He on Surfaces"
S. Chu	"Laser Cooling and Manipulation of Neutral Particles"

Tuesday Morning-Chair: A. Goldman

I. Silvera	"Pressing for Metallic Hydrogen:Experimental and Theoretical Challenges"
R. Webb	"Persistent Currents in Normal Metal Rings"
C. Gould	"Is the A Phase Really "The A Phase"?"

Tuesday Evening-Chair: R. Hallock

A. Tonomura	"Electron Holography of Flux Lines"
G. Ihas	"Phase Slips and Vortex Nucleation and Motion in Superfluid ^{4}He Flow"

Wednesday Morning-Chair: G. Aeppli

C. Broholm — "Vortex Lattices and Antiferromagnetism in Superconducting UPt_3"

L. Taillefer — "Coupling of Magnetic and Superconducting Order Parameters in UPt_3"

Z. Fisk — "Kondo Insulators"

Wednesday Evening, 8pm, Public Lecture:John Clarke

Thursday Morning-Chair: H. Bozler

A. Leggett — "Possible Mechanism of Nucleation of ^{3}He-B by High Energy Particles"

D. Osheroff — "Gamma Ray and Neutron Mediation of the Superfluid ^{3}He-A to ^{3}He-B Transition"

E. Thuneberg — "Nucleation of Vortices and the A-B Interface in Superfluid ^{3}He"

Thursday Evening-Chair: E. Andrei

R. Willett — "New Phases in the Fractional Quantum Hall Regime"

B. Altshuler — "Persistent Currents as a Persistent Problem"

Friday Morning-Chair: R. Koch

P. Gammel — "Statics and Dynamics of Flux Lattices in the Oxide Superconductors"

M.P.A. Fisher — "The Vortex Glass Transition and Melting in the High T_c Superconductors"

P. Kes — "Studies of Flux Pinning and Creep in Extremely Anisotropic Superconductors"

Friday Evening-Chair: J. Ketterson

A. Hebard "C_{60}:Molecule of the Year"

C. Varma "Superconductivity in Eulerenes"

Saturday Morning-Chair: J. Maynard

D. Ceperley "Path Integral Simulations of Helium"

I. Affleck "Quantum Disordered Antiferromagnets"

D. Awschalom "Quantum Tunneling and Spin Dynamics in Nanometer-Scale Magnets"

1992 Aspen Winter Physics Conference
Condensed Matter Physics
Participants List

Elihu Abrahams (Rutgers U)
Gabriel Aeppli (ATT Bell Labs)
Glenn Agnolet (Texas A&M U)
James Allen (U Michigan)
Eva Andrei (Rutgers U)
Silvia Bacci (Beckman Institute)
David Bishop (ATT Bell Labs)
Collin Broholm (Johns Hopkins U)
Moses Chan (Penn State U)
Steven Chu (Stanford U)
Piers Coleman (Rutgers U)
Alan Dorsey (U Virginia)
Richard Ferrell, (U Maryland)
Daniel Fisher (Harvard U)
Zachary Fisk (LANL)
Francis Gasparini (SUNY Buffalo)
Rolfe E. Glover (U Maryland)
Lori Goldner (NIST)
Dennis Greywall (ATT Bell Labs)
William Halperin (Northwestern U)
Gary Ihas (U Florida)
Eric Isaacs (ATT Bell Labs)
John Ketterson (Northwestern U)
Rafael Kleiman (ATT Bell Labs)
Donald Liebenberg (ONR)
Thom Mason (ATT Bell Labs)
John Mester (Harvard U)
Michael Nahum (UC Berkeley)
Douglas Osheroff (Stanford U)
Emil Polturak (Technion)
John Reppy (Cornell U)
Zack Schlesinger (IBM)
Louis Taillefer (Grenoble)
Akira Tonomura (Hitachi Ltd.)
Andrew Tyler (Manchester)
Mats Wallin (Indiana U)
Robert Willett (ATT Bell Labs)
Claire Yu (UC Irvine)

Philip Adams (Louisiana State U)
Ian Affleck (U British Columbia)
Guenter Ahlers (UC Santa Barbara)
Boris Altshuler (MIT)
David Awschalom (UC Santa Barbara)
Alexander Balatsky (LANL)
Hans Bozler (USC)
David Ceperley (U Illinois)
Premi Chandra (NEC)
John Clarke (UC Berkeley)
Arnold Dahm (Case Western Reserve U)
William Evans (Harvard U)
Herbert Fertig (U Kentucky)
Matthew Fisher (IBM Watson Labs)
Peter Gammel (ATT Bell Labs)
Thierry Giamarchi (ATT Bell Labs)
Allen Goldman (U Minnesota)
Chris Gould (USC)
Bob Hallock (U Massachusetts)
Arthur Hebard (ATT Bell Labs)
Masahiko Inui (LANL)
P.H. Kes (U Leiden)
Wiley Kirk (Texas A&M U)
Anthony Leggett (U Illinois)
Ying Liu (U Colorado)
Julian Maynard (Pennsylvania State U)
Eric Meyer (Harvard U)
Nobuhiko Nishida (Tokyo Inst. of Tech.)
Jeevak Parpia (Cornell U)
Khandker Quader (Kent State U)
Bob Richardson (Cornell U)
Isaac Silvera (Harvard U)
Erkki Thuneberg (Helsinki)
Alexei Tsvelik (Princeton U)
C. M. Varma (ATT Bell Labs)
Richard Webb (IBM Yorktown)
P. E. Wolf (CRTBT-CNRS)
Gergely Zimanyi (UC Davis)